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| 10/609,114 | 06/27/2003 | Robert Austin Porter | POR1000.02A1 | 9256 |
| 7590 O'BANION & RITCHEY Wells Fargo Center Suite 1550 400 Capitol Mall Sacramento, CA 95814 | | | | |
| 07/24/2008 | | | | |
| EXAMINER | | | | |
| CHEUNG, VICTOR | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 3714 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/609,114

Applicant(s)

PORTER, ROBERT AUSTIN

Examiner

VICTOR CHEUNG

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38 and 40-55 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 38 and 40-55 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Applicant's reply has been received 05/01/2008.

Claims 38 and 40-55 are pending.

Claim Rejections - 35 USC § 112

2. Claims 54-55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 54 includes limitations of the document being hand-held and the document being imaged while being hand-held. It does not appear that the limitations of the document being "hand-held" is described in this application's specification or the applications from which the present application claims priority.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-20, 22-62, and 66-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark (US Patent No. 5,321,611) in view of Pollard et al. (US Patent Application Publication No. 2003/0025951).

Re Claim 38: Clark discloses a system comprising a data field residing on a document (Col. 3, Lines 9-13), means for digitally imaging the document (Col. 3, Lines 9-10), analyzing a digital image to obtain a digital representation of the user response data contained in a region of interest (Col. 3, Lines 13-17), means for generating a numerical score or letter grade from the digital representation of the user response data (Col. 4, Lines 24-26), and means for transferring the numerical score or letter grade to an electronic database (Col. 4, Lines 1-3; Col. 10, Lines 9-11).

However, Clark does not specifically disclose that the data field is variably positioned and angled using an image feature to identify the location of the data field, calculating coordinates of the image feature for finding the region of interest containing user response data.

Pollard et al. disclose that a data field can be variably positioned, angled, and oriented, using image features to identify the location of the data field, and calculating coordinates of the image feature containing the region of interest with user response data (Paragraphs 8-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a data field can be variably positioned, angled, and oriented, using image features to identify the location of the data field, and calculating coordinates of the image feature containing the region of interest with user response data, thereby providing a paper-to-computer interface that does not require a special orientation of the paper to process images and data on the paper.

Re Claim 40: Clark discloses using a digital camera (Col. 3, Lines 34-35).

Re Claims 41, 43: Regarding the limitations of identification data, grade data, input bubbles, and hand-written indicia, these limitations are related to the intended use of the printed matter of

the data field and thus are not functionally related to the substrate/label and will not distinguish the invention from the prior art in terms of patentability.

Re Claim 42: Clark does not specifically disclose a rectangle surrounding the data field. However, Keogh et al. (USPN 5,134,669) which is incorporated in Clark by reference, discloses various data fields surrounded by rectangles (Fig. 3).

Pollard et al. disclose a rectangle surrounding the data field (Paragraph 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a rectangle surrounding the data field, thereby providing an easily identifiable image feature.

Re Claim 44: Clark discloses the system controlled by at least one microprocessor and associated programming (Fig. 2).

Re Claim 45: Clark discloses a database as discussed above.

However, Clark does not specifically disclose an electronic gradebook.

Examiner takes OFFICIAL NOTICE that electronic gradebook databases are a well known type of database in the art, storing grade information regarding students.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to transfer the score or grade data to a grade book, thereby achieving the predictable result of keeping track and record of a student's progress.

Re Claim 46: Claim 46 includes limitations that have been discussed above with regard to claims 38, 40, 41, and 45, each discussed above.

Re Claim 47: Claim 47 includes limitations that have been discussed above with regard to claim 42 above.

Re Claim 48: Claim 48 includes limitations that have been discussed above with regard to claim 43 above.

Re Claim 49: Claim 49 includes limitations that have been discussed above with regard to claim 44 above.

Re Claims 50, 52: Claim 50 includes several limitations already discussed above with regard to claims 38 above. Pollard et al. disclosed calculating position, orientation, size, and distortion of the image feature. McMillin (USPN 5,103,490), which is incorporated by reference into Clark, discloses using position, orientation, size, and distortion to find regions of interest containing user response data and input bubbles that are measured for darkness (Col. 8, Line 23-Col. 12, Line 42; Fig. 5; Col. 3, Lines 4-20).

Re Claim 54: Claim 54 includes limitations already discussed above with regard to claims 50 and 52 above, and additionally includes the limitations of the document being hand-held. The document being hand-held is a recitation of the intended use of the claimed invention and must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Each of the documents in Clark, Pollard et al., and Clark in view of Pollard et al. are able to be handheld.

Re Claims 51, 53, 55: Clark discloses an image sensor, lens, associated electronics, and a support structure in the form of a scanner with a digital camera (Col. 3, Lines 34-37).

However, Clark does not specifically disclose the support structure having no moving components.

Pollard et al. disclose a means for digitally imaging a document with no moving components required (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have an imaging means with no moving components, thereby achieving the predictable result of allowing the imaging means to image the entire document quickly.

Response to Arguments

5. Applicant's arguments, see Page 20, filed 05/01/2008, with respect to Knowles "calculating coordinates" have been fully considered and are persuasive. The rejection has been withdrawn.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hashimoto (USPN 6,351,560) discloses an apparatus and method for locating an object on a form including locating coordinates on a distorted image such that information can be ascertained.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTOR CHEUNG whose telephone number is (571)270-1349. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. C./

Examiner, Art Unit 3714

/XUAN M. THAI/

Supervisory Patent Examiner, Art Unit 3714